



ZERO TRANS FAT CANOLA FRYING OIL

# Deep Fry Protocol



ZERO TRANS FAT CANOLA FRYING OIL

## Recommended Frying Practices

The following recommended practices are designed to help you ensure that you are getting the best product possible from your fryers.

### 1) TEMPERATURE CONTROL

Uncontrolled temperature can lead to rapid fryer oil breakdown, high oil absorption, and inconsistent or unsatisfactory fried foods. All of these things will adversely affect frying operation and can lead to increased costs. The following points are a guide to proper temperature control:

- a) **Check Oil Operating Temperature Daily** – If the oil is too cold, it will lead to a poor colour, greasy product that takes longer to cook. If the oil is too hot, it will over brown the outside without properly cooking the inside. Using a frying thermometer, check the operating temperature of the frying oil daily to ensure it does not exceed 185°C (365°F). Record temperature in Deep Fryer Log.

If necessary, adjust the fryer's thermostat setting. For example, if the desired cooking temperature is 185°C (350°F) and the oil operating temperature is 194°C (380°F), lower the thermostat temperature -9°C (15°F) to compensate.

- b) **Lower the Temperature When Not in Use** – Frying oil deteriorates faster when a fryer is left at a high temperature when not in use. Turn the fryer temperature down to 105°C (225°F) when not in use.

*TIP: Remove the fry baskets when you lower the temperature as a reminder to turn the temperature back up when fryer is used again.*

- c) **Start up Slowly** – When heating oil, slow heat is essential as excessive high heat will breakdown the oil. Start fryers at low temperatures 105°C (225°F). To minimize oil breakdown, wait to start fryers until 15 minutes prior to initial use and increase the temperature to the operational level five minutes prior to use.
- d) **Allow for Recovery Time** – Fryers must also be allowed time to recover to correct frying temperature before adding more food.
- e) **Check Food Cooking Instructions** – Check cooking instructions on package for correct fry temperatures for specific fried foods.

### 2) CLEANING AND MAINTENANCE

Proper cleaning and maintenance of the oil will extend the frying life. The following suggestions will help maintain your frying oil:

- a) **Skim for Floating Particles** – Skimming the frying oil helps to remove small pieces of food or excess breading from the fryer which will blacken and deposit on other products fried in the oil if they are not removed. Skimming should be done whenever floating particles are present.
- b) **Filter Oil Daily** – Filter the oil at least once a day to remove all sediment accumulated in the fryer.



Healthier Oils. Healthier Business.™



ZERO TRANS FAT CANOLA FRYING OIL

- c) **Check Oil Quality** – Observe quality of oil and discard if necessary.
- d) **Check Oil Level** – Ensure deep fryer oil does not drop below the fryer fill line.
- e) **Monitor Basket Limits** – Overloaded fryer baskets with too much food will drop the frying temperature excessively, resulting in lost frying time, longer heat recovery and a poor quality product.

*TIP: A good guide to follow is one (1) kg of food to ten (10) kg of frying oil.*

- f) **Dedicated Fryers for Specific Foods** – Designate a fryer for French Fries and another for protein products. If a third fryer is available, use it for onion products.
- g) **Two or More Fryers? Use a Rotation Fry Method** – This method will allow you to rotate oil from one fryer to the next as it is used. Please note proper cleaning of fryers in between transfers is highly recommended and fryer one should always have the freshest fryer oil. After a few days of use, put the oil from fryer one through a daily filtering process and rotate it to fryer two. After a few days of use in fryer two, transfer the oil to a third fryer. Oil from fryer three should be discarded after it has reached the end of its fry life. Each restaurant should ultimately decide how long the oil stays in each fryer.
- h) **Filter Oil and Cover Fryers When Not in Use** – Exposure to air contributes to oil breakdown. Therefore, if the oil is not to be used for a length of time – overnight or during the weekend, for example – it is best to filter the oil and cover the fryer with a metal lid, keeping oil as cool as possible.
- i) **Clean Your Fryer Weekly** – Clean and boil the fryer weekly using an approved commercial cleaner developed for fryers. Remove all gums from fryers and elements and rinse thoroughly. Rinse and boil the fryer thoroughly to ensure all soap residue is flushed out as it is extremely harmful to your fryer oil. Rinse again with clean water and dry thoroughly. Refill fryer following the rotation method, adding fresh oil if needed.

### 3) HANDLING OIL, FOOD AND KITCHEN TOOLS AROUND THE FRYER

Proper handling of the products you are frying and the tools you use in the kitchen can help to improve your frying quality. For example:

- a) **Monitor Turnover** – Turnover is the amount of oil added daily to “top up” the fryers. A good volume of food through the fryer means high turnover, which will significantly reduce the amount of oil that will be discarded.
- b) **Watch the Salt** – Salt shortens the frying life of the oil. Do not salt food near the fryer and avoid using processed foods containing salt as an ingredient.
- c) **Remove Loose Breading** – Breaded products should be shaken away from the fryer to remove any loose or excess breading. All products to be fried should be as dry as possible.
- d) **Shake Ice Crystals** – Keep water away from the fryer. Shake ice crystals off frozen foods away from the fryer. Do not dump frozen French Fry bag directly into baskets, while they are over the fryer.
- e) **Utensils and Fry Baskets** – Copper, brass or iron utensils should be kept away from the oil as they will promote oil breakdown. Broken baskets should be replaced.





ZERO TRANS FAT CANOLA FRYING OIL

## Specific Handling Tips for Canola Harvest Frying Oil Users

Canola Harvest Frying Oil, is naturally stable, unlike hydrogenated frying shortenings. Therefore a few extra guidelines are required to ensure you get the best quality when using Canola Harvest Frying Oil.

### **BLANCHING:**

Traditional potato blanching in hydrogenated frying shortenings requires a pre-fry blanch that could be done several hours prior to use at temperatures anywhere between 129°C to 185°C (265°F to 325°F). The “solids” found in hydrogenated frying shortenings would adhere to the potatoes as they cooled, thus coating them with a “film” that prevented browning or oxidization.

A pre-blanch process is not necessary when frying with Canola Harvest Frying Oil as there are no “solids” to create a film coating during the cooling process.

Therefore, we recommend using frozen french fries instead of fresh cut french fries.

However, if blanching is the preferred method of preparation, we recommend one of the two following methods to prepare fresh cut french fries for frying with Canola Harvest Frying Oil:

- 1) Blanch french fries in Canola Harvest Frying Oil at 177 °C to 185°C (350°F to 365°F). This still will not coat the fries with any solids, but it will crisp the skin which will prevent oxidization and browning.
- 2) Don't pre-blanch potatoes. Cook fresh fries from raw to finished state.

*TIP: When blanching, do not fill baskets past ¼ fill mark, as an over-loaded basket will slow cooking time dramatically and cause greasier french fries.*

### **TESTING USED OIL:**

To ensure you maximize fry life and minimize use of substandard frying oil, we recommend using a Polar Compound monitor that gives a numeric reading of the used oil. Monitors are available for \$350 to \$2,000 depending on the model and manufacturer.

Another effective way to test the quality of the used oil is to measure the Free Fatty Acid (FFA) level. We recommend using 3M Monitor Test Strips. These strips test the quality of used oil. Similar to litmus paper, each strip has four purple bars which change to yellow to indicate the FFA level of the used oil. The more purple bars that change to yellow, the higher the FFA level, indicating the oil may need to be changed.



ZERO TRANS FAT CANOLA FRYING OIL

## Deep Frying: Trouble Shooting Guide

### OIL SMOKES EXCESSIVELY

#### Noticeable smoke coming from fryer.

- 1) Inadequate cleaning procedures.
- 2) Detergent film due to insufficient rinsing.
- 3) Foreign material in fryer.
- 4) Excessive crumb material in fryer.
- 5) Use of poor quality food.
- 6) Use of inferior or broken-down oil.
- 7) Temperature too high; may indicate a faulty fryer thermostat.

### OIL NOT BROWNING FOOD

#### Food not cooking/browning properly in expected time.

- 1) Frying at too low a temperature; may indicate a faulty fryer thermostat.
- 2) Frying too much food at one time.
- 3) Not allowing oil time for temperature recovery.
- 4) The oil is not broken in enough because oil is too fresh.

### OIL FOAMS EXCESSIVELY

#### Fine white/yellowish bubbles build up on the surface of oil as frying proceeds.

- 1) Failure to clean and rinse equipment properly (detergent film).
- 2) Overheating of oil or failure to reduce heat when fryer not in use.
- 3) Insufficient skimming and/or filtering.
- 4) Water, salt or excessive food particles are present in the fryer.
- 5) Brass or copper utensils used in fryer.
- 6) Use of inferior or broken down oil.
- 7) Temperature too high; may indicate a faulty fryer thermostat.

### FOOD GREASY, TOO MUCH FAT ABSORPTION

#### Oil drips or pours from finished product or oil in fryer used up too quickly.

- 1) Too low a frying temperature; may indicate a faulty fryer thermostat.
- 2) Lack of proper fryer temperature recovery.
- 3) Overloading fryer with food.
- 4) Food undercooked.
- 5) Improper preparation of food.

### OIL/FOOD HAS "OBJECTIONABLE" ODOUR OR FLAVOUR

#### Unappetizing odours from fryer

- 1) Overheating fryer oil.
- 2) Inadequate skimming or filtering of fry oil.
- 3) Inadequate cleaning/rinsing of equipment.
- 4) Defective equipment.
- 5) Poor ventilation.
- 6) Use of inferior or broken down oil



ZERO TRANS FAT CANOLA FRYING OIL

### RECOMMENDED EQUIPMENT

- 1) Deep Fryer Thermometer with a temperature range up to 204°C (400°F).
- 2) Square 5 1/2 inch Fine Mesh Skimmer to remove floating particles.
- 3) Filter, cone, bucket and nylon scrub brush to clean oil, or preferably an automated filter/pump unit.
- 4) 3M Shortening Monitor Test Strips to determine discard point.
- 5) Fryer boil out cleaner.
- 6) Deep Fryer Log.
- 7) Personal Protective Equipment (PPE) such as heat resistant gloves, apron and face/eye protection.

## Critical Tips

### CONSTANTLY:

- Skim floating particles to prevent oil deterioration.
- Observe fryer oil quality. If it is too dark, clean or replace it.
- Turn down fryers when slow to extend fry life.
- Turn fryers on 15 minutes prior to initial use to prevent oil deterioration.

### DAILY:

- Check and fill fryer up to fill line.
- Take fryer oil temperature and record in the Deep Fryer Log.
- Drain oil through filter at least once, preferably twice each day.
- Flush the fryer preferably after lunch service.
- Cover the fryer overnight and when not in use to limit light and oxygen from deteriorating the oil.

### WEEKLY:

- Thoroughly clean and boil the fryer with a specialized cleaner for optimal fryer and oil performance.
- Inspect fryer hood and vent for grease drips and clean if necessary.



ZERO TRANS FAT CANOLA FRYING OIL

## Deep Fryer Log Instructions

- 1) Ensure sufficient copies of Deep Fryer Log are ready for use.
- 2) Turn on fryers 15 minutes prior to first use of the day.
- 3) Take fryer oil temperature daily once the oil temperature is up to the proper level.
- 4) Record the fryer temperature in the Deep Fryer Log.
- 5) When changing fryer oil, circle the date on the Deep Fryer Log.
- 6) Monitor days of fry life.
- 7) When two or more fryers are present, use the rotation method and record each fryer on a separate Deep Fryer Log sheet.
- 8) Ensure employees are aware of the Deep Fryer Protocol.



ZERO TRANS FAT CANOLA FRYING OIL

### Deep Fryer Log: Fryer # \_\_\_\_\_

Month	Record Temp	Month	Record Temp	Month	Record Temp	Month	Record Temp
1		1		1		1	
2		2		2		2	
3		3		3		3	
4		4		4		4	
5		5		5		5	
6		6		6		6	
7		7		7		7	
8		8		8		8	
9		9		9		9	
10		10		10		10	
11		11		11		11	
12		12		12		12	
13		13		13		13	
14		14		14		14	
15		15		15		15	
16		16		16		16	
17		17		17		17	
18		18		18		18	
19		19		19		19	
20		20		20		20	
21		21		21		21	
22		22		22		22	
23		23		23		23	
24		24		24		24	
25		25		25		25	
26		26		26		26	
27		27		27		27	
28		28		28		28	
29		29		29		29	
30		30		30		30	
31		31		31		31	

Ensure sufficient blank copies of Fryer Log are kept in back of manual.



Omega-9 Oils  
Canola

Healthier Oils. Healthier Business.™